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BTN Thursday Thoughts

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Quote of the Day:

> "Tesla will be the first Semi customer. We plan to use the Tesla Semi for our own logistics by transporting Model 3 components from Gigafactory 1 to Fremont."
>
> -Tesla Annual Letter

Tesla has been a battle between technology believers and cash flow realists for some time. The announcement of the new Tesla Semi last November was par for the course. We noticed that after all the fawning press and talk of orders - in the 4Q Investor Letter, it was announced that the first customer of Tesla Semi will be Tesla itself! (We wonder if that means that Tesla's Solar City is the #2 customer also).

Tech Companies and Capital Needs

(FB, TWTR, TSLA, NFLX AMZN)

With the recent pressure that tech stocks have faced, the debate has begun if it is time to buy the dips or are the companies about to see a prolonged wave of negative investor sentiment that will continue pushing down the stock prices. Some of these companies have lofty valuations and we're not going to comment on that topic here. Instead, we are going to highlight that some of these companies need continual external capital to fund their businesses and others are able to fund their businesses internally.

In our view, companies that are more likely to suffer a prolonged swoon in stock price are the ones that need to raise more equity and debt when perceptions are negative. It quickly becomes obvious that not all of the new tech companies are equal in this area. For example, compare Facebook and Twitter:

Facebook	2017	2016	2015	2014	2013
Cash from Ops	$24,216	$16,108	$10,320	$5,457	$4,222
Less Share Comp	$3,723	$3,218	$2,960	$1,786	$906
Less CapX	$6,733	$4,491	$2,523	$1,831	$1,362
Acquisitions	$122	$123	$313	$4,975	$368
Free Cash Flow	$13,638	$8,522	$4,524	($3,135)	$1,586
Share Count	2,956	2,925	2,853	2,664	2,517

Twitter	2017	2016	2015	2014	2013
Cash from Ops	$831	$763	$383	$82	$1
Less Share Comp	$434	$615	$679	$632	$600
Less CapX	$284	$319	$379	$342	$232
Acquisitions	$1	$168	$579	$311	$340
Free Cash Flow	$112	($339)	($1,252)	($1,204)	($1,170)
Share Count	733	702	622	605	190

In both cases, we adjusted the cash flow for compensation paid with equity as well as acquisitions with stock. Under this method, Facebook had negative free cash flow once in the last five years due to a large acquisition in 2014. Facebook also is not seeing excessive share dilution and it has $42 billion in cash vs. total debt of only $10 billion. It would be free cash flow positive if it paid its employees fully in cash.

We wrote about Twitter a few weeks ago and it is a much different cash flow story than Facebook. No one wanted its stock for an acquisition last year, which stemmed some of the cash flow burn in 2017. The company also cut advertising, R&D, and capital spending to help cash flow and we believe it may already be using fully depreciated equipment. So with all those cuts, TWTR managed its first free cash flow positive year in the last five. The company has been issuing shares much more rapidly. While it still has $4.4 billion in cash vs. $2.4 billion in total debt, that cushion isn't huge for a company that regularly burns through large amounts of cash.

Another name that is in the news quite often is Tesla. We won't spend too much time here because this story of it acquiring Solar City is well known along with the problems it has had delivering cars. It's debatable if this is really a tech company or a car company. What is obvious is teen-age girls at the mall would tip their tiaras to them as Tesla has been able to spend money at a rate few could imagine and is one of the few companies we've ever seen report negative cash flow from operations despite share-based compensation and hefty depreciation:

Tesla	2017	2016	2015	2014	2013
Cash from Ops	($61)	($124)	($525)	($57)	$265
Less Share Comp	$467	$334	$198	$156	$81
Less CapX	$4,329	$1,945	$1,902	$1,224	$303
Acquisitions	$125	$1,933	$12	$0	$0
Free Cash Flow	($4,982)	($4,336)	($2,637)	($1,437)	($119)
Share Count	166	144	128	125	119

So Tesla's cash burn is accelerating, its shares are being diluted at a faster rate, and it has only $3.4 billion in cash with over $23 billion in liabilities. Of the $23 billion, over $10 billion are now bonds and thus incur interest expense. This company does not need another cash cost.

A third company we want to highlight is Netflix, which has been growing its subscriptions and programming.

Netflix	2017	2016	2015	2014	2013
Cash from Ops	($1,786)	($1,474)	($749)	$16	$98
Less Share Comp	$182	$174	$125	$115	$73
Less CapX	$227	$185	$169	$144	$120
Acquisitions	$0	$0	$0	$0	$0
Free Cash Flow	($2,195)	($1,833)	($1,043)	($243)	($95)
Share Count	447	439	437	432	425

The reason Netflix has become such a cash consumer is it has boosted its efforts in licensing and creating its streaming content. It amortizes these assets rapidly, which penalizes earnings. That is a conservative way to account for it and while some assets may last up to ten years, many are amortized when they are aired the first time such as talk shows or the accelerated methods will dramatically cut the value of the asset on the balance sheet very rapidly. While conservative, this also conforms to the basic operating model, which is content assets normally require cash upfront and replacing that content is a huge cash investment every year. Thus, here is what is going on in the cash flow statement:

	2017	2016	2015	2014	2013
Additions to Content - Neg Cash	($9,806)	($8,653)	($5,772)	($3,773)	($3,031)
Amortization of Content - Pos Cash	$6,198	$4,788	$3,405	$2,656	$2,122
Net Cash Flow from Content	($3,608)	($3,865)	($2,367)	($1,117)	($909)

Comparing the negative cash flow from creating content to actual free cash flow, it is clear that Netflix would be cash flow positive if it were not paying so much for new media content. The question is how does this really stop? The company needs to have content to attract and retain customers. The company has $2.8 billion in cash, which is still a large figure even compared to $15.4 billion in liabilities. However, the existing bill coming due for content within 12 months is $4.2 billion vs. the $2.8 billion in cash. Moreover, while Netflix is not seeing massive stock dilution, it has started to borrow money very rapidly.

	2017	2016	2015	2014	2013
New Borrowing	$3,021	$1,000	$1,500	$400	$500
Total Net Debt *	$11,180	$8,158	$4,875	$2,970	$2,421
Equity	$3,582	$2,680	$2,223	$1,858	$1,334
Operating Inc.	$839	$380	$306	$403	$228
ROI	5.70%	3.50%	4.30%	8.30%	6.10%

*Total Net Debt is the sum of outstanding LT Debt + LT Content Obligations + ST Content Obligations – Cash – ST Investments

We believe the content liabilities clearly represent debt that will be paid quickly. The borrowing figure above only represents increases in debt in the form of bonds or bank borrowing. We believe the ROI is declining here but the timing of when debt is incurred vs. the earnings period can skew that figure. We ran that simply as 12 months trailing Operating Income divided by period ending Total Net Debt and Equity. Before content spending exploded and a growing drag on cash flow, Netflix ROI was higher. It is important to note that the company is borrowing money at 3-5/8%-5-7/8% now. ROI is not covering the cost of funds very often and borrowing new money amid rising interest rates may become a problem here.

Amazon.com is another company that often is part of the large tech stocks. This one is has seen cash flow pressure as it builds its Cloud business and its logistical network.

Amazon.com	2017	2016	2015	2014	2013
Cash from Ops	$18,434	$17,272	$12,039	$6,842	$5,475
Less Share Comp	$4,215	$2,975	$2,119	$1,497	$1,134
Less CapX	$11,955	$7,804	$5,387	$4,893	$3,444
Cap Leases	$4,799	$3,860	$2,462	$1,285	$775
Acquisitions	$13,972	$116	$795	$979	$312
Free Cash Flow	($16,507)	$2,517	$1,276	($1,812)	($190)
Share Count	493	484	477	462	465

Since Amazon started its AWS (Cloud Storage) operation, capital spending has risen very rapidly. It is even a bigger investment as it has bought much of the equipment via capital leases. This allows traditional cash flow measures to appear larger. Cash from operations only include the interest expense, not the principal payments. Cash from Investing Activities are not penalized for the capital spending as the payments flow through over time in the financing section. The amount of spending in this area has picked up considerably:

	2017	2016	2015	2014	2013
Capital Lease Additions	$9,637	$5,704	$4,717	$4,008	$1,867
Capital Lease Payments	$4,799	$3,860	$2,462	$1,285	$775

If these assets were bought with cash and flowed through the investing section, free cash flow would be much lower. All the purchases eventually become debt that is repaid with interest and consumes cash flow.

Amazon still has $31 billion in cash, which exceeds its debt. It also has faster turning current assets like inventories and payables that become cash. We have issues that Amazon's retail operation may face higher logistical costs going forward and it is already lower margin than several bricks-and-mortar retailers. We think the cash flow here may be pressured going forward because of the Cloud and the leases. But, eventually, the Cloud operation should involve hefty maintenance investment, but the cash flows should be stronger. Even adjusting for capital leases the company is free cash flow positive.

To summarize these companies – all seek to preserve cash by paying employees with stock. This works if the stock price is strong and employees see it becoming higher pay. If the stock price declines, the compensation from equity declines and eventually employees want more cash wages. Facebook and Netflix probably have the least pressure in this area. Facebook has been cash flow positive even if all of this was turned into a cash expense. Netflix has a much smaller amount of pay here.

On recent cash flow trends, we have a much greater issue with both Netflix and Tesla. Both appear to need rising levels of capital to fund their new spending. Amazon fits this mold now with the Cloud build-out. However, Amazon still has significant cash on hand and it could shrink the cash burn by slowing the rollout of the Cloud business. We also do not expect Amazon to make a Whole Foods type of acquisition every year and that was a big part of its enormous spending in 2017. So, this is a question of inherent cash flow burn vs. either a one-time event or expanding at a faster pace.

Social media is coming under the most regulatory pressure right now. That should impact both Facebook and Twitter. Regulation normally means more expenses. Facebook would again be in a stronger position to absorb that and has much greater liquidity. We believe Twitter will need to see higher R&D and higher capital spending going forward before any regulatory issues.

It's worth pointing out that during Mark Zuckerberg's testimony on Tuesday, all of these stocks were responding very favorably. In the S&P 500, AMZN, FB, NFLIX are 4.35% of the index and in the Nasdaq 100, AMZN, FB, NFLIX, and TSLA are 16.78% of the index. Passively run index and index hugging strategies have some sizable exposure to companies with cash flow problems. We would be leery of problems like these hurting returns in the future.

The Impact of FIFO (first-in, first-out) Inventory Accounting in a Rising Cost Environment

How do you calculate the gross profit a company makes when it sells an item? You take a widget out of the warehouse and sell it to the customer for the selling price (x). If the direct production cost of the widget was y, then gross profit is x-y. Seems simple enough. However, productions costs like raw materials, labor and shipping change over time, which means the widgets in the warehouse did not all cost the same thing to make. How do we decide which widget to match against the current sale? That is where the choice of inventory accounting method comes in.

There are three main methods to match the cost of the item being sold out of inventory with the current sale:

- First-in, first-out (FIFO)- the oldest item in inventory is matched against current sales
- Last-in, first-out (LIFO)- the newest item in inventory is matched against current sales
- Average cost- the cost of the current item is determined as a weighted average of all items remaining in inventory.

The method a company chooses will have a significant impact on the gross profit it reports, particularly in times of changing cost levels. During times of rising input costs, the FIFO method will delay the impact of those costs on gross margin as the older, lower cost inventories are expensed against current sales, resulting in a higher gross margin than would be reported under the LIFO method. This impact will likely be magnified by the fact that the company will often have already raised the price on the item it is selling to reflect the higher costs.

As we appear to be entering a time of rising wages and commodity costs, the benefit from utilizing FIFO accounting will become more of an issue when analyzing financial results. Below, we examine how the choice of FIFO is already likely benefitting reported profits for companies.

Please note that these are not full reviews of these companies, nor recommendations to buy or sell.

Martin Marietta Materials (MLM)

Martin Marietta Materials (MLM) is a major producer of aggregates, cement, ready-mix concrete and asphalt. The company owns dozens of aggregate and limestone quarries and mines around the country from which it derives the major components of the products it sells. It also purchases cement and liquid asphalt from third parties. MLM's major direct production costs by category and the percentage makeup of each for 2017 are presented below. We tip our hat to MLM for its excellent disclosure of its cost structure and the factors impacting it.

-Labor (mostly mine and factory workers)	24%
-Raw materials (cement and liquid asphalt)	18%
-Repairs and maintenance (keeping loaders, trucks, conveyors, etc. running)	12%
-Depreciation, depletion and amortization (on mine properties as well as equipment)	12%
-Energy (diesel fuel for heavy equipment and power to run factories)	9%
-Contract Services	8%
-Suppliers	8%
-Other	9%

Labor is the largest component of MLM's direct production costs. Wages are finally starting to show meaningful increases after years of stagnation and given the tightening conditions in the labor market and the stimulus effect of lower regulations and corporate tax reform, it is reasonable to expect this to continue. Management noted in the conference call that unemployment in Indianapolis is 1.8%, below what is considered full employment.

Asphalt prices fluctuate over time, although both were higher in 2017 and the company is predicting higher asphalt costs in 2018. MLM can meet much of its cement needs internally and is less exposed to fluctuations there. Diesel fuel is the company's largest energy cost, and the rising price of oil should ensure meaningful increases there. Management predicted an increase in diesel costs of $0.44 per gallon, leading to a $20 million in increase over 2017. In addition, while the company passes through the cost of shipping product to customers, it incurs costs to ship product from quarries and mines to their storage facilities by rail and waterway. These rising costs are absorbed into cost of sales as well.

With all this in mind, let's look at current inventory levels. The following table shows MLM's inventory days of sale for the last eight quarters.:

	12/31/2017	9/30/2017	6/30/2017	3/31/2017
COGS	$711	$796	$789	$697
Inventory	$601	$576	$550	$537
COGS YOY growth	-1.6%	-1.8%	8.2%	8.3%
Inventory YOY growth	15.1%	13.4%	8.9%	10.6%
COGS Seq growth	-10.6%	0.8%	13.3%	-3.6%
Inventory Seq growth	4.2%	4.8%	2.4%	2.9%
Inventory DSIs	***77.0***	***66.1***	***63.6***	***70.3***

	12/31/2016	9/30/2016	6/30/2016	3/31/2016
COGS	$723	$811	$730	$643
Inventory	$522	$508	$505	$485
COGS YOY growth	9.6%	-1.1%	1.2%	4.3%
Inventory YOY growth	11.2%	9.4%	5.2%	-3.9%
COGS Seq growth	-10.8%	11.1%	13.4%	-2.5%
Inventory Seq growth	2.6%	0.7%	4.0%	3.5%
Inventory DSIs	***65.8***	***57.2***	***63.1***	***68.8***

Inventory DSI spiked year-over-year in the 9/17 and 12/31 quarters. Management indicated in the fourth quarter conference call that it wanted to boost inventories to avoid shortages, particularly in areas where conditions lead to longer lead times:

> *"Well, I guess, there are couple of things that happened there. Did we have good pricing? We did. Did we have good cost control? We did. And did we put some more inventories in the ground anticipating a busy 2018? We did some of that too."*

However, the liquidity section of the 10-K also offered the following explanation for the higher inventory levels:

> "Cash provided by operations in 2017 reflects a higher buildup of inventories resulting from *lower-than expected shipment volumes*."

This explanation seems a little less benign. Management was very open in the call about infrastructure spending in 2017 being much less vibrant than it was expecting, but it was hopeful that the promised increase in spending from federal initiatives will begin to come through in 2018. We have written in the past about our belief that infrastructure will be

growth area in the near future, so we would tend to agree that MLM should see a good tailwind on the top line over the next couple of years.

Despite the subdued infrastructure spending which led to a slight decline in sales volumes in 2017, pricing has remained strong. Average selling prices for aggregates rose by 4.5% in 2017 after 7.3% and 8.0% increases in 2016 and 2015, respectively. The strong pricing has led to significant strength in gross margin during the year, as shown in the following table:

	12/31/2017	9/30/2017	6/30/2017	3/31/2017
Sales	$3,966	$3,944	$3,960	$3,874
Gross Profit	$972	$939	$940	$914
Gross Margin	**24.5%**	**23.8%**	**23.7%**	**23.6%**

	12/31/2016	9/30/2016	6/30/2016	3/31/2016
Sales	$3,819	$3,715	$3,693	$3,637
Gross Profit	$912	$871	$840	$793
Gross Margin	**23.9%**	**23.4%**	**22.7%**	**21.8%**

So how will FIFO accounting impact MLM going forward?

Regardless of how intentional the inventory buildup at MLM was, it has left the company with a stash of inventories whose cost basis is almost 80 days behind the current cost environment. The higher production rates to build the inventory also would have resulted in a beneficial cost/unit as the company spread fixed costs over a higher than normal seasonal production level. Any increase in labor, fuel or raw materials costs will be delayed by almost a quarter before hitting the income statement. Thus, we would expect gross margin for the first quarter of 2018 to experience a significant beneficial impact from the buildup of lower cost inventories at the end of the year. As the year moves on, however, these inventories will have to be replaced with higher cost inventories. If infrastructure demand allows for MLM to continue to raise prices, it will be able to offset this impact. Nevertheless, the tailwind from the inventory build will have dried up.

Watsco (WSO)

Watsco (WSO) is the country's largest distributor of HVAC (heating, ventilation, air conditioning) products to contractors and dealers that serve the replacement and new construction markets in North America. The company has grown from $64 million in sales in 1989 to its current level of $4.3 billion through an aggressive roll-up strategy. However, the rampant acquisition activity cooled down years ago and the company used its ample cash flow and equity issuance to pay down debt, leaving it in its current position to invest in technology and wait on attractive deals.

As a distributor, WSO operates with thin margins and lives to time its inventory purchases with manufacturer price increases and what it charges its customers. There was a wave of price increases by HVAC manufacturers late in the year, including a 4-6% increase announced by Lennox to take effect 1/1/18, a 6% by Ingersoll Rand, maker of Trane, and a 5% by Aaon among several others. WSO took advantage to buy ahead of these price increases which drove up its inventory balances in the third and fourth quarters. The following table shows the calculation of inventory days of sale for the last eight quarters:

	12/31/2017	9/30/2017	6/30/2017	3/31/2017
COGS	$723	$934	$966	$654
Inventory	$761	$786	$770	$752
COGS YOY growth	5.5%	-0.6%	4.7%	2.3%
Inventory YOY growth	11.1%	6.3%	2.8%	0.7%
COGS Seq growth	-22.5%	-3.3%	47.8%	-4.7%
Inventory Seq growth	-3.1%	2.1%	2.5%	9.7%
Inventory DSIs	***96.0***	***76.8***	***72.8***	***104.9***

	12/31/2016	9/30/2016	6/30/2016	3/31/2016
COGS	$686	$939	$923	$639
Inventory	$685	$740	$749	$746
COGS YOY growth	0.6%	5.4%	-0.6%	5.7%
Inventory YOY growth	1.6%	-1.6%	-6.2%	-6.8%
COGS Seq growth	-27.0%	1.8%	44.4%	-6.3%
Inventory Seq growth	-7.4%	-1.3%	0.4%	10.7%
Inventory DSIs	***91.2***	***71.9***	***74.1***	***106.6***

Management addressed the jump in inventories in the fourth quarter conference call:

> *"We do want to take advantage of our balance sheet and times with* ***buying inventory that will allow us to use price and basically take advantage of opportunity. We've done that. We did that in the fourth quarter. The inventory that's reflected is higher than what it otherwise would've been****. But that's, again, using some of our balance sheet to hit the 2018 season with. We won't tell you how much or who, but that's part of the part of the strategy of using our balance sheet."*

WSO is likewise moving to increase prices on its customers:

> *"Yeah.* ***We started to see a bit of the price increase that we rolled out in the fourth quarter. It was late fourth quarter when we started pulling it out, so it had a small impact on the fourth quarter. Most of the price increases became effective, however, in December-January as we said at the last call. We're always optimistic on price increases, but probably a low-single digit is what we think we'll realize out of this increase on the equipment side****. A little fuzzier when we get to the parts and supplies, which direction those are going to go."*

It is worth noting that the company has a joint venture with Carrier consisting of former Carrier-owned locations contributed to the JV. This arrangement accounted for 62% of the total company revenue in 2017. In addition, given WSO's size and relationships with manufacturers, it is reasonable to assume that it did not pay the full headline amount of the announced price increase and that a "low single-digit price increase of its own will cover the increase it paid vendors at the end of the year.

WSO's gross margin has been remarkably stable the last several quarters:

	12/31/2017	9/30/2017	6/30/2017	3/31/2017
Sales	$4,342	$4,291	$4,303	$4,241
Gross Profit	$1,066	$1,053	$1,059	$1,041
Gross Margin	**24.5%**	**24.5%**	**24.6%**	**24.5%**

	12/31/2016	9/30/2016	6/30/2016	3/31/2016
Sales	$4,221	$4,211	$4,147	$4,156
Gross Profit	$1,035	$1,029	$1,012	$1,016
Gross Margin	**24.5%**	**24.4%**	**24.4%**	**24.4%**

We assume the company had success in pushing through its price increase in the first quarter of 2018 given market conditions and the company's level of service it offers customers. However, given that it takes over 90 days for it to turn its inventories, most if

not all of the first quarter should be shielded from the impact of the higher cost inventories it purchased at the end of the year as under FIFO, the older, lower-price inventories will be expensed first. Meanwhile, revenues will already be benefitting from the company's price increases implemented in December and January. Thus, we would expect to see a strong gross margin performance in the first part of the year that will fade as the year moves on.

Other FIFO or Average Cost Companies with Rising Inventories We Have Mentioned in Recent EQ Reviews

Medtronic (MDT)

We noted in a 3/1/18 EQ Review of Medtronic (MDT) that inventory days of sales jumped in the last two quarters:

	1/31/2018	10/31/2017	7/31/2017	4/30/2017	1/31/2017	10/31/2016
COGS	$2,191	$2,120	$2,349	$2,436	$2,268	$2,326
Inventory	$3,751	$3,638	$3,538	$3,338	$3,720	$3,717
COGS YOY growth	-3.4%	-8.9%	3.9%	3.1%	5.9%	6.6%
Inventory YOY growth	0.8%	-2.1%	-1.2%	-3.9%	5.2%	5.7%
COGS Seq growth	3.3%	-9.7%	-3.6%	7.4%	-2.5%	2.9%
Inventory Seq growth	3.1%	2.8%	6.0%	-10.3%	0.1%	3.8%
Inventory DSIs	**156.2**	**156.6**	**137.4**	**125.0**	**149.7**	**145.8**

Management attributed the increase in the 10/17 quarter to building ahead of a product launch. In addition, it cited currency impact as having an increasing effect on inventories in the 1/31 period. However, we would have expected a sequential decline in the 1/31 quarter after the product launch in took effect in the quarter. In addition, when the 10-Q came out subsequent to our initial review, it showed that most of the increase in the quarter came in finished goods:

	1/31/2018	10/31/2017	7/31/2017	4/30/2017	1/31/2017	10/31/2016
Raw Materials % of inventory	20.2%	20.8%	20.4%	20.0%	21.6%	20.6%
In-Progress % of inventory	13.9%	14.2%	13.8%	13.7%	14.4%	14.3%
Finished Goods % of inventory	65.9%	65.1%	65.7%	66.2%	64.0%	65.1%
	100%	100%	100%	100%	100%	100%

A jump in inventory can mean sales are not materializing as rapidly as management expected and can be an indication of upcoming discounts or even write offs. In the case of MDT, we are more concerned with discounts or write-offs at this point. However, the company's use of FIFO inventory accounting could result in a benefit to the next couple of quarters as lower cost, older inventory is expensed and later replaced with higher cost inventory.

Johnson Controls (JCI)

We noted rising inventories at Johnson Controls (JCI) in a 3/8/18 EQ Review:

	12/31/2017	9/30/2017	6/30/2017	3/31/2017	12/31/2016	9/30/2016
COGS	$5,266	$5,623	$5,252	$4,986	$4,972	$4,566
Inventory	$3,459	$3,209	$3,384	$3,138	$2,943	$2,888
COGS YOY growth	5.9%	23.1%	40.7%	44.7%	44.6%	-36.5%
Inventory YOY growth	17.5%	11.1%	415.9%	368.4%	354.9%	21.5%
COGS Seq growth	-6.3%	7.1%	5.3%	0.3%	8.9%	22.3%
Inventory Seq growth	7.8%	-5.2%	7.8%	6.6%	1.9%	340.2%
Inventory DSIs	**59.9**	**52.1**	**58.8**	**57.4**	**54.0**	**57.7**

Management attributed this to inventory build ahead of expected demand. JCI's raw materials consist largely of industrial commodities such as lead, steel, tin and aluminum which have risen in price along with higher labor and energy costs. JCI's inventory increase has been recent and not extremely large. The company also turns its inventory relatively quickly which means the delay before costs will flow through the income statement will not be as pronounced as some we have mentioned. Regardless, this warrants attention in future quarters.

Tiffany (TIF)

We mentioned Tiffany's (TIF) inventory accounting a couple of weeks ago. While TIF uses the average cost method of inventory valuation, this can still result in similar cost behavior as there is a delay in higher costs actually hitting the income statement. Also, TIF has very slow moving inventory which can take in excess of 250 days to turn. Therefore, increases or decreases in raw materials prices (gold, silver, diamonds) take multiple quarters to actually show up in results. Consider the following historical table reprinted from the 3/23/18 report.

	2010	2011	2012
Raw material Inv Growth	19%	47%	1%
Finished goods Inv Growth	9%	16%	13%
Sales Growth	14%	18%	4%
Gross Margin change	+260bp	-10bp	-200bp

Note how raw materials costs jumped dramatically in 2011, but did not translate to lower gross margins until 2012.

Gross margins are currently at 5-year highs and given falling diamond prices and stable gold/silver, we do not see any problems heading this way. However, when the company's raw material prices inevitably do increase, the delay in their realization will likely catch investors off guard as it has in the past.

Disclosure

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